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|--|-------------|----------------------|---------------------------------|-----------------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO.            |
| 10/557,694   | 11/22/2005  | Hideo Hada           | SHIGA7.033APC                   | 7849                        |
| 20995 7590 02/13/2009<br>KNOBBE MARTENS OLSON & BEAR LLP<br>2040 MAIN STREET<br>FOURTEENTH FLOOR<br>IRVINE, CA 92614 |             |                      | EXAMINER<br>EOFF, ANCA          |                             |
|  |             |                      | ART UNIT<br>1795                | PAPER NUMBER                |
|  |             |                      | NOTIFICATION DATE<br>02/13/2009 | DELIVERY MODE<br>ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com  
eOAPilot@kmob.com

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/557,694 | <b>Applicant(s)</b><br>HADA ET AL. |  |
|                              | <b>Examiner</b><br>ANCA EOFF         | <b>Art Unit</b><br>1795            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 9-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,9-15 and 17 is/are allowed.
- 6) ☒ Claim(s) 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/04/2008</u>  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1, 3 and 9-17 are pending. Claims 2, 4-8 and 18-24 have been cancelled.
2. The foreign priority documents JP 2003-160478, filed on June 5, 2003 and JP 2003-428853, filed on December 25, 2003 were received and acknowledged. However, in order to benefit of the earlier filing dates, certified English translations are required.

The certified translation of JP 2004-57449, filed on March 02, 2004 was received and acknowledged.

### ***Claim Rejections - 35 USC § 102 and 35 USC § 103***

3. The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

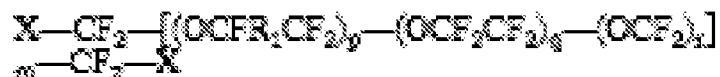
A person shall be entitled to a patent unless –  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 16 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawasato et al. (US Pg-Pub 2003/0049456).

Kawasato et al. disclose a polymer having 1 or 2 reactive groups at both terminals, said polymer being represented by the formula (I) :



(I) (formula 1 in par.0057), wherein X may be a hydroxyl group (par.0058).

The polymer of Kawasato et al. meets the limitation for a resin comprising a -CR<sub>1</sub>R<sub>2</sub>OH group only at a terminal of a principal chain of the resin, wherein R<sub>1</sub> and R<sub>2</sub> are electron attractive fluorine atoms.

Kawasato et al. further disclose that the polymer (I) is used for an antireflection film (par.0052) and additives, such as silanes may be added for strengthening adhesion (par.0060). The examples of the preferred silane additives include nitrogen-containing compounds (see silanes comprising amino groups in par.0092-0099).

In the alternative, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the nitrogen-containing silanes in combination with the polymer (I), these components being clearly taught by Kawasato as being used for the antireflection layer.

The fact that the composition is used for as a photoresist is an intended use and adds no patentable weight to the claim. Therefore, the composition for the antireflection film comprising the polymer of formula (I) and the nitrogen-containing silanes of Kawasato et al. is equivalent to photoresist composition of claim 16.

***Allowable Subject Matter***

5. Claims 1, 3, 9-15 and 17 are allowed.

Kawasato et al. (US Pg-Pub 2003/0049456) do not disclose that the polymer (I) comprises a structural unit derived from a (meth)acrylate ester comprising acid dissociable, dissolution inhibiting group and a structural unit derived from a (meth)acrylate ester having a lactone ring.

There are no prior art teachings to motivate one of ordinary skill in the art at the time of the invention to modify the polymer (I) of Kawasato et al. in order to obtain the resin of the instant application.

Kawasato et al. fail to disclose a polymer of formula (I) used in combination to a photoacid generator, for a photoresist composition.

There are no prior art teachings to motivate one of ordinary skill in the art at the time of the invention to use the polymer (I) of Kawasato et al. in combination with an acid generator.

***Response to Arguments***

6. With regard to the applicant's arguments, see pages 6-7 of the Remarks filed on February 06, 2009, the examiner would like to note the following:

- The rejection of claims 4 and 18-21 under 35 USC 112-2<sup>nd</sup> paragraph is withdrawn following the cancellation of the claims.

- The rejection of claims 4 and 7 under 35 USC 103(a) over Kawasato et al. (US Pg-Pub 2003/0049456) is withdrawn following the cancellation of the claims.

- The rejection of claims 1, 3, 11 and 19 under 35 USC 102(b) over Kawasato et al. (US Pg-Pub 2003/0049456) is withdrawn following the applicant's amendment to the claims.

- The rejection of claim 10 under 35 USC 103(a) over Kawasato et al. (US Pg-Pub 2003/0049456) in view of Satoh et al. (WO 02/077116) is withdrawn following the applicant's amendment to the claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANCA EOFF whose telephone number is (571)272-9810. The examiner can normally be reached on Monday-Friday, 6:30 AM-4:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. E./

Examiner, Art Unit 1795

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1795